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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,004	11/17/2003	Fermin Viteri	0145.001	4208

7590 10/08/2004

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EXAMINER

CASAREGOLA, LOUIS J

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,004

Applicant(s)

VITERI, FERMIN

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 26-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-20 is/are rejected.
- 7) ☒ Claim(s) 21-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election

Applicant's election of the species comprising the power plant configuration of Figure 20 and a diluent composed primarily of water is acknowledged. Applicant has listed claims 1-3, 6-9, 11-13, and 17-26 as readable on this species. It is pointed out however that claims 1-3, 6-9, 11-13, and 26 do not in fact read on the elected embodiment of Figure 20. Claims 1 and 26, as well as claims 2, 3, 6-9, and 11-13 dependent upon claim 1, recite an ion transfer membrane air separator; see for example, claim 1, lines 2-5. The elected embodiment shown in Figure 20 does not include a separator of this type, and the specification in fact identifies the separator depicted in Figure 20 as cryogenic type separation unit; see page 41, lines 16-17. Claim 1 and related dependent claims additionally recite an air heater located upstream of the air separator and heated by combustion products taken from between a gas generator and a turbine; see claim 1, lines 14-17. The elected Figure 20 embodiment however includes no such heater and no link of any type between the combustion products flow path and the separator air inlet.

For the reasons pointed out above, claims 1-3, 6-9, 11-13, and 26 are withdrawn from consideration along with non-elected claims 4, 5, 10, 14-16, and 27. An action on the merits of elected claims 17-25 is set forth below.

Objections To Claims

Claims 22-25 are objected to under 37 CFR § 1.75(a) as including the following errors:

In claim 22 and related dependent claims 23-25, "said last turbine" (claim 22, line 2) lacks antecedent basis. This expression should be changed to "a last turbine".

Claim Rejections - 35 USC § 102

Claims 17-20 are rejected under 35 USC § 102(e) as being anticipated by Viteri et al (US 6,637,183).

The power generation system recited in the present claims reads on prior art systems of the type disclosed by Viteri. Attention is called to Viteri's Figure 10; note air separator 730 and combustion gas generator 760, the gas generator being supplied with oxygen from the air separator as well as hydrocarbon fuel (CH₄) and diluent (water from condensers 830 and 840). Note also combustion gas turbine 770 and diluent heater 820, the heater being in heat transfer relationship with combustion products in the turbine exhaust. With regard to claim 18, attention is called to the fact that condensers 830 and 840 constitute a combustion products separator, as indicated by

the outflow of CO₂ and excess water. With respect to claim 20, attention is additionally called to the presence of reheater 780 and second turbine 790.

Claims 17 and 20 are also rejected under 35 USC § 102(b) as being anticipated by Osgerby.

Osgerby discloses a further example of a prior art power generation system readable on the present claims. Attention is called to Osgerby's Figure 1; note air separator 12 and combustion gas generator 14, the gas generator being supplied with oxygen from the air separator as well as hydrocarbon fuel and diluent (CO₂ in this case). Note also combustion gas turbine 16, diluent heater 26, reheater 20, and second turbine 21.

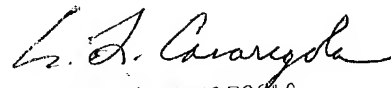
Allowable Subject Matter

Claim 21 and related dependent claims 22-25 are objected to as depending from a rejected parent claim. These claims will be allowed if claim 21 is rewritten in independent form, and claims 22-25 are further amended to overcome the § 1.75 objection set forth above. Allowance of this application is further contingent upon cancellation of all non-elected claims as well as the rejected claims.

Additional References

Frutschi et al is cited as disclosing a further pertinent example of power generation system comprising an air separation unit.

L. J. Casaregola
703-308-1027 (M-F; 7:30-4:00)
703-872-9306 FAX
October 4, 2004


LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached at 703-308-2675.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).